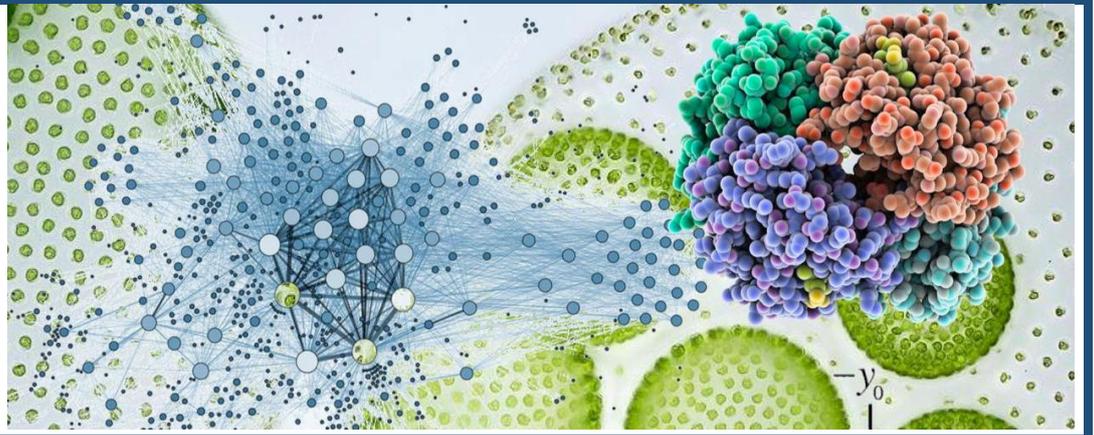


# NEWSLETTER

Department of  
Informatics



No. 07/2019  
5<sup>th</sup> April 2019



Editor-in-chief: Pinar Heggernes. Editor: Linda Vagtskjold. Contributions or comments to the newsletter are very welcome.

## Dear colleagues,

This week our department got its second ever female full professor in informatics: Lilya Budaghyan. It was about time! I wish I could have announced this news already on the International Women's Day 8<sup>th</sup> of March, but things take always a little longer time than expected. In 2001, when our department was already 14 years old, it got its first female associate professor ever, and then two years later its first female full professor. It is amazing (in a negative way) that 16 more years had to pass until the second female full professor. I sincerely hope and believe that it will not take 16 new years until the third female full professor! In fact, I think this can already happen within a couple of years. Today, we have three full-time female associate professors in addition to the two professors. I dare predict that in five years from now, we have at least five female full professors in informatics at our department, as well as several new female associate professors!



The formalization of Lilya's position as a full professor was long overdue; she has already been qualified for several years. On the positive side, it happened at a time where we are placing quite a bit of emphasis and resources into cryptography, and it thus fits very nicely into the "big picture". This week we have had the pleasure of saying hello to our new professor-II in cryptography, Vincent Rijmen, who is one of the two inventors of the world-wide used encryption standard AES. In addition, our new full professor to come, Andrey Bogdanov, signed his contract with us, and thanks to him we will be strengthening our research and education in practical cryptography. Our university took this opportunity to make a [press release about our research environment in cryptography](#). At the same time, Simula UiB has also hired new cryptographers, and together the two research groups make one of the largest crypto research environments in North Europe! [Our university newspaper På Høyden made a story about this.](#)

The focus of many of us these days is the 10<sup>th</sup> of April deadline of the Research Council, and I wish you all good luck with the completion and the submission of your proposals! Several of us who are not submitting proposals, including the administration, are concentrating our efforts on the 15<sup>th</sup> of April national application deadline for higher education. Ida and Liljan did a wonderful job in preparing an information meeting this week for high school pupils about the various ICT studies in Bergen, including HVL and Infomedia. Thanks to all our colleagues who contributed to this event! We also had companies like DNB, Equinor, Vizrt, Bouvet, and Rainfall present and the event, to tell the prospective students the benefits of studying ICT in general, and informatics in particular.

The 15<sup>th</sup> of April is also the application deadline for master studies. However, the offers to master students are sent separately from different institutions, and they can actually accept several offers. Every year we see that many students accept a master offer from us, but only to quit after a few weeks. I think we need to seriously rethink how we welcome new master students, and the process of pairing master students and advisors. This year, we can in addition expect an imbalance in the directions that the master students apply for. It looks like we will have a heavy majority wanting to do machine learning. In this respect, it will be useful for every research group to think about possible master projects where machine learning could be incorporated, so that we can partition the students more evenly to all groups. We are in the process of thinking creatively around these issues, and hopefully we will be able to present a suggestion for better routines before the summer.

I wish you all a very nice weekend!

-Pinar

## The Dean's Blog – Helge K. Dahle

[The Dean's blog](#) aims to inform us of ongoing work and processes at the Faculty of Mathematics and Natural Sciences.

His latest postings: [Lyser fyrtårnet sterkt nok?](#) - [Strategiske grep for at UiB skal bety noko for folk og vise igjen i samfunnet](#) - [Tre gode grunner til at Marineholmen er en klyngesuksess](#)



## Welcome new colleagues



### George Petrides

George started this week in his two years position as researcher in Cryptology at the Selmer Center. The position is connected to Tor's project *Modern Methods and Tools for Theoretical and Applied Cryptology* (CryptoWorld) funded by the Norwegian Research Council.

George is from Cyprus. He got his PhD "Cryptographic Applications of Non-Commutative Algebraic Structures & Investigations of Nonlinear Recursions" at the University of Manchester in 2006. He came from a postdoc position at the Vrije Universiteit Brussel and has previously had a postdoc position at the NTNU, Norway.



### Vincent Rijmen

Vincent Rijmen joins our department and the Selmer center as an adjunct professor. He has his main position as a professor of cryptography at KU Leuven in Belgium.

He is one of the two designers of the Advanced Encryption Standard (AES) that won the U.S. National Institute of Standards of Technology competition in 2001. In 2003, the U.S. National Security Agency announced that AES could be used to protect the government's classified information up to "top security". Currently the AES is used in over 2 billion devices and almost all security applications. In 2002, Prof. Rijmen was named in the MIT Technology Review TR100 as one of the top 100 innovators in the world under the age of 35. Besides AES, Prof. Rijmen also co-designed many strong cryptographic algorithms for a variety of applications. Another algorithm (WHIRLPOOL) that he co-designed was also adopted as a standard by the ISO and IEC.

## Congratulations colleagues

### Congratulations Lilya!



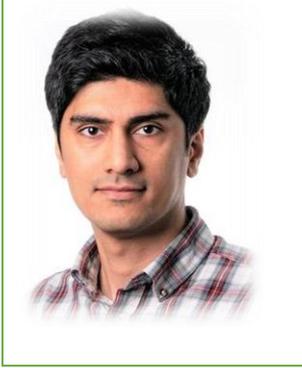
Congratulations Lilya Budaghyan with new position at our department from April 1, 2019:

Professor of information security!

She is the second female full professor in informatics at UiB ever!



## Congratulations Ahmad!



Congratulations Ahmad Hemmati with new position at our department from April 1, 2019:

Associate Professor of optimization!



## Congratulations Igor!

Happy 60<sup>th</sup> birthday, Igor!



## Congratulations Noeska and Stefan with the 2019 Dirk Bartz Prize!



The winning entries of the [2019 prize](#): Model-based Visualization for Medical Education and Training. **Noeska Smit**, Kai Lawonn, Annelot Kraima, Marco DeRuijter, **Stefan Bruckner**, Elmar Eisemann, and Anna Vilanova

Please find some background information on the prize [here](#).

This is actually even not first time that the VisGroup is receiving this prize - in 2013, the first place went to Bergen, [Helwig Hauser and Veronika Solteszova](#).

## Actualities [På Høyden](#) - [Khrono](#) – [News from NFR](#) – [News from UiB](#) – [Informatics on Facebook](#)

### Department of informatics Solstrand gathering, April 29-30

The annual department gathering for 2019 is only three weeks away!

[Please register here by 10<sup>th</sup> of April](#)

[The program](#) is now ready!

Here you will find a [questionnaire](#) for inputs for the session “How do we see our own department”. **Please provide your feedback by April 24”**

### Department of Informatics

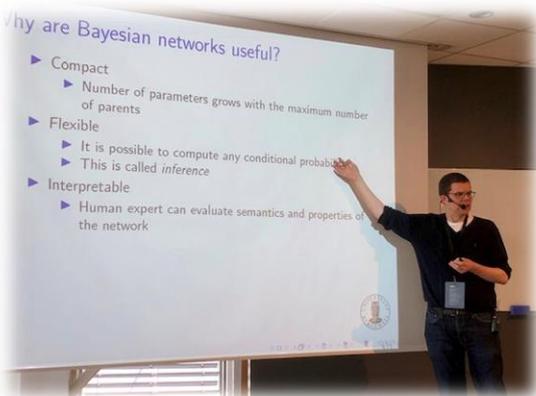


Annual Department of informatics gathering, April 29-30



## Picture report fra NORA kick-off

NORA (Norwegian Artificial Intelligence Research Consortium - [www.nora.ai](http://www.nora.ai)) that our university is a partner of, had its kick-off conference in Oslo on April 1 with researchers from all partner institutions. UiB was represented by Ketil Malde, Pekka Parviainen, Hans Skaug, Yushu Li, Marija Slavkovik and Bjørnar Tessem, in addition to Pinar Heggernes who is the chair of the board of NORA. The minister of digitalization, Nikolai Astrup, was present at the conference for two hours, and he had an active dialogue with the researchers on ideas for the coming national strategy on artificial intelligence. [Please find UNIFORUM's news report from the conference here.](#)



## Report: Bergen AI & Machine Learning symposium, 25-26 March 2019

The fields of artificial intelligence and machine learning are currently receiving enormous attention, and actors from industry, research, and education across the world are racing to build up competence and capacity. In the Bergen region, there are now many groups and corporations involved in artificial intelligence research and innovation. To continue to build an innovative and vibrant community around these fields, the University of Bergen organized a symposium on artificial intelligence and machine learning on March 25-26. The symposium was attended by 33 researchers representing a multitude of institutes, research organizations from the Bergen area and beyond.

As an arena for researchers and innovators in the field, the symposium served to highlight both the quality and quantity of exciting ongoing work. Collaboration and exchange of ideas will further strengthen the regional competence and capacity in AI and machine learning.



### Information meeting on ICT studies in Bergen

On Tuesday April 2, around 50 pupils from 11 different high schools visited us to get information about undergraduate studies in ICT at UiB and HVL. Bouvet, Equinor, DnB, Rainfall and Vizrt were also there to tell them about the need for ICT competence in their businesses. The pupils were interested and we hope we managed to inspire them to start studying ICT in Bergen!



## “Ka vil du bli?”

The past two Thursdays the department has been visited by groups of 9th graders who were eager to learn about computer science and us! During these 1-day seminars, they were presented with the educational possibilities at the department and gained insight into how the career of a game developer evolved, who of course studied informatics at the department. The pupils also got to try block-based programming of Bit:Bot's, and eat pizza. Two successful days!



Checking the code for the Bit:Bot



## The Supply Chain Online Competition 2019



The national supply chain online competition was organized successfully by Ahmad Hemmati on April 3.

65 participants from five different universities in Norway competed.

The winning team, represented by Baptiste Van Brandt from NHH, received their certificate and prize from Ahmad.

## Trial lecture in Software by Svetlana Jaksic on April 10 at 13:15



Svetlana Jaksic is one of the applicants that we are interviewing for the tenure track associate professor position in software. She will give a trial lecture on April 10 at 13:15 in the lecture room on the 5<sup>th</sup> floor.

**Title:** Hardware supported data race detection

**Abstract:** Data races belong to the class of concurrency-related errors that are very hard to detect. Variety of static and dynamic tools and methods for data race detection have been developed. In this talk, we will investigate the use of hardware-based tracing facilities for the purpose of detecting potential data races. Modern processors offer advanced facilities for introspection of control flow. Information about data such as memory addresses has to either be logged explicitly by the running code through additional trace packets in the hardware trace, or on a different software-based channel. Specification language TeSSLa can be compiled to the special FPGA-based hardware which enables checking the instruction trace augmented with necessary data in parallel to the running system. We present a data race detector based on the lockset algorithm, written in TeSSLa. We discuss options for minimizing the amount of necessary instrumentation through the help of static analysis. We discuss some of the related approaches for prevention of data races and other concurrency errors.

# Department of Informatics



## Scientific Computing in Oil & Gas Industry



T. Matthey received his PhD in Computer Science applied to Molecular Dynamics at the University of Bergen, Norway in 2002. During his PhD he worked on a joint program on Molecular Dynamics with the University of Notre Dame, IN, USA. From 2002 to 2005, he worked at Unifob / University of Bergen, Norway as Post Doc on Molecular Dynamics and Parallel Computing.

In 2005 he joined SPT Group, Bergen, Norway and worked on developing desktop drilling software (Drillbench, Advanced Blowout Control and OLGA) with emphasize on scientific computing and drilling simulator engines. He joined Schlumberger in 2013 when SPT Group got acquired by Schlumberger.

### **Abstract:**

This talk shall give some insights on how scientific computing plays its role in the oil & gas industry and how we apply it. And some examples to illustrate how simulation software can help us to make oil & gas industry more safe.

Large Auditorium 2nd floor Datablokken  
Thursday April 25th at 14:15 – 15:00  
Refreshment will be served from 14:00

## PhD Updates

### PhD defense Adam Peter Daniel Giess



Adam Peter Daniel Giess will defend his thesis "Understanding translational landscapes through the footprints of ribosomes" on Thursday 11 April at 09:15, Large Auditorium, Datablokken. All are welcome!

- Opponent: ph.d. Kent Duncan, The Medical Center, Hamburg-Eppendorf (UKE), Tyskland
- Opponent: Associate Professor ph.d. Lars-Gustav Snipen, Norges miljø- og biovitenskapelige universitet
- Committee member: Associate Professor ph.d. Sushma Grellscheid, Institutt for biovitenskap, University of Bergen
- Custos/Leader of the defense: Professor, Inge Jonassen, Department of Informatics, UiB

Please find [the press release here](#).

## Funding opportunities

### Marie Skłodowska-Curie Actions: Research Fellowship Programme

The Individual Fellowship (IF) Programme within the Marie Skłodowska-Curie Actions (MSCA) is a bottom-up, excellence funding program which aims to support the career development and training of researchers through international and intersectoral mobility. One can apply in two main categories: (i) European Fellowships are held in EU Member States or Horizon 2020 Associated Countries and are open to researchers either coming to Europe from any country in the world or moving within Europe. The researcher must comply with the rules of mobility in the country where the European Fellowship is held.[1] (ii) Global Fellowships are based on a secondment to a third country and a mandatory 12 month return period to a European host. The researcher must comply with the rules of mobility in the country where the Global Fellowship secondment takes place, not for the country of the return phase.[1]; [1] [MSCA-IF-2019](#); Further reading: [MSCA-IF general information](#)

Please note that this program is targeting Experienced Researchers, i.e. researchers that at the date of the call deadline are in possession of a doctoral degree or have at least four years of full-time equivalent research experience.

If you have a researcher in mind that could be relevant for one of the two funding schemes and/or are interested in applying yourself, please contact [Stefanie.Meyer@uib.no](mailto:Stefanie.Meyer@uib.no). Early planning is crucial as this is a highly competitive program. **Deadline: 11 September 2019**

### NCI Grants for Member University Researchers

The Nordic Centre in India announces the following programmes for researchers at our NCI member universities:

- NCI Travel Grant:** NCI will annually support 6 scholars from member universities travelling to India for the purpose of research with an NCI Travel Grant that covers travel expenses upto 500 Euros per successful applicant.
- NCI Academic Activity Grant:** NCI will be supporting collaborative academic activities between member universities and Indian higher educational institutions through a grant for a max of 3500 Euros per successful application.
- Ganga Mahal Scholar in Residence Programme:** NCI will support one scholar annually from a member university travelling to India for the purpose of research with the NCI Ganga Mahal Scholar in Residence Programme. This programme is in cooperation with Karlstad University and it covers travel costs upto 500 Euros and one month's stay at Karstad University's India Study Centre located in Varanasi.

The **deadline** for receiving applications for this Spring 2019 Call is **15th of May 2019**. A second call will be announced in the Fall of 2019 .

## Insentivmidler for kvalitetsarbeid i studiene og nominasjoner til Ugleprisen for 2019

Studieadministrativ avdeling lyser ut insentivmidler for utdanningskvalitet, og ber om nominasjoner til [Ugleprisen](#). Fakultetet ber om at søknader om insentivmidler sendes fakultetet **innen 10. april**. Frist for å melde kandidater til Ugleprisen er innen **20. mai**.

## Research Science and Seminars

### Den store formidlingsprisen 2019

Fakultetet ønsker å stimulere til økt formidling, og oppretter fra i år av en egen pris på 50 000 kroner som deles ut i forbindelse med bachelorseremonien i Universitetsaulaen i juni.

Kandidaten skal vurderes på bakgrunn av følgende kriterier:

«*Formidlingsprisen skal inspirere til å ta formidlingsoppdraget alvorlig. Prisvinneren skal strekke seg langt for å bidra til å opplyse samfunnet, skape debatt, synliggjøre forskning og utdanning ved Det matematisk-naturvitenskapelige fakultetet, stimulere til formidling eller på annen måte være en viktig bidragsyter til kunnskapsspredning og samfunnsdebatt.*»

Alle som studerer, arbeider eller forsker under Det matematisk-naturvitenskapelige fakultetet oppfordres til å [sende inn nominasjoner her](#) innen **15. mai 2019**.

## Vacant positions

### Postdoctoral Research Fellow position within Molecular and Cancer Biology

Closing date: 17.04.2019. Please find [the announcement here](#).

## HR, Health, Safety and Welfare [sikresiden.no](#) – [UiB employees welfare benefits](#)

### New service team for absence and parental leaves at UiB!

Are you planning your parental leave? If so, you need to [contact the Serviceteam](#) who will help both you and your leader in this process. The Serviceteam will help everyone who will take parental leave, both mothers and fathers, by guiding them through their rights and the applications.

The serviceteam will also support the units on registration of absence and strengthen the refund-process towards Nav. Read more about the service [here](#) (Norwegian only, English version will come later).

### Department Boat Trip and Summer Party – save the date 22nd August!



On the 22<sup>nd</sup> of August, in the afternoon, we are planning a summer party combined boat trip for all our employees together with all our new students of the fall semester of 2019!

Two boats will come and pick us up from Marineholmen, close to the department building. Food and refreshments will be served. There will be games and entertainment.



We encourage everybody to reserve the date in their calendars and plan to join this event!

## Fire extinguishing course

All employees at our university are required to attend a fire extinguishing course at least once. There are several courses in May, and one in June which is held in English. [Information about the courses and sign up here.](#)

Please notice that they are offering one course in English only once per semester. This semester the course in English will be held on 23<sup>rd</sup> May.



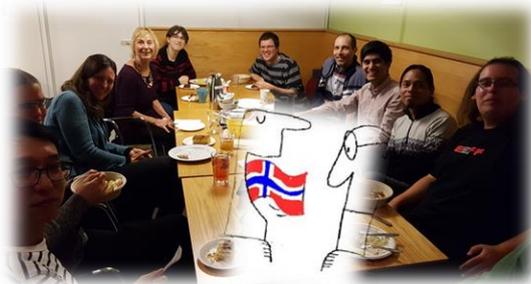
## Reminder: Informatics yoga on Wednesdays

Yoga is a great way to reduce stress and tensions from work. Yoga classes are held at our department on Wednesdays at 2:30 p.m. to 3:30 pm at the Meeting room in 5<sup>th</sup> floor.



Our professional yoga instructor, Kjersti Næss, is teaching in English. No signing up, and no participation fee. Please bring your own yoga mat. We also have some mats for loan.

## Reminder: Kakeklubben on Mondays



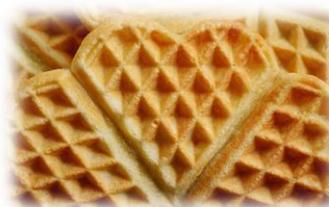
Kakeklubben aims to help our international colleagues to practice Norwegian while spending nice time together with people across group borders. Club meetings are held on Mondays at 12 o'clock in the lunchroom, 4<sup>th</sup> floor.

You bring your own lunch, and we share a cake or fresh baked waffles. All are welcome!

We hope to see you there, both internationals and Norwegians!

## Reminder: Waffle-Oracle every Thursday – employees are very welcome!

Did you know that our students serve waffles every Thursday between 14.00 and 16.00? All faculty and other employees of the department and most welcome, too! Our students would like to see more employees at the waffle sessions!



## J. S. Bach: Johannespasjonen



Sunday 14. April, 19.30 at Bergen Cathedral (Domkirken)

Special offer to UiB employees: 250 (standard price: 350), use the code bergendomkorjohannespasjon at [ticketco.events/no/en](https://ticketco.events/no/en)

## Jubileumskonsert for Jiri Hlinka i Universitetsaulaen

Prof. Jiri Hlinka Klaverakademi har gleden av å invitere til jubileumskonsert i anledningen Jiri Hlinkas 75-års jubileum i år og Klaverakademiets 10-års jubileum i fjor,

ONSDAG 10. APRIL 2019, KL 19.30 i UNIVERSITETSAULAEN I BERGEN

Spesialtilbud på billetter for Universitetets ansatte: kr 300,- inkl. avgifter. (Kun 4 pr stk.)

Link til billetter for UiB-ansatte: [https://www.ticketmaster.no/event/605181?CL\\_ORIGIN=ORIGIN2](https://www.ticketmaster.no/event/605181?CL_ORIGIN=ORIGIN2)

## Rakhmaninovs tredje pianokonsert tors. 11.4 og fred. 12.4



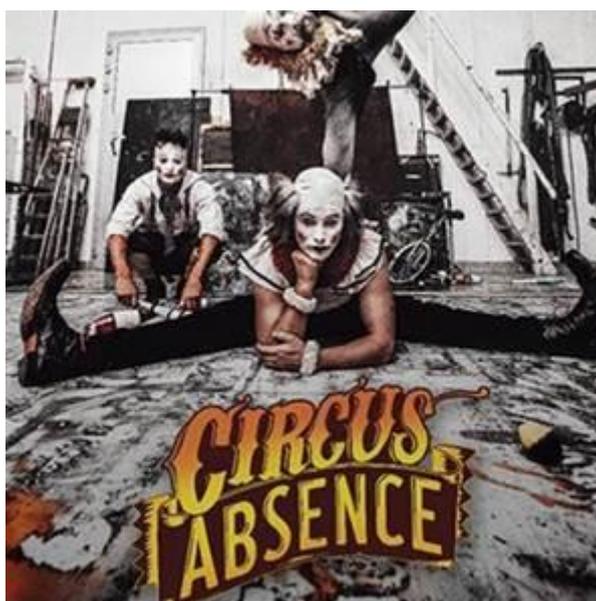
For English speaking audience please [follow this link for both reading about and buying tickets for the concert](#)

Discount code: **UIB-APRIL**

**NOK 330/290/240** (Regular prices are 495/445/365)

You must go through the entire purchase process before you can enter the discount code. On the right side there is an update button that you have to press to bring up the offer price that will then lead you to the shopping cart.

## Barnas DNS: Circus Absence



**Snart premiere: Circus Absence**

[Like etter påske blir det action, dans og en spennende historie på Store Scene](#)

**Tors 09.mai** kl 16.30 ca 1 time. Anbefalt fra 5 år.

**UiB pris kun 100,-**

Bestill [her](#) eller ring 55 60 70 80 innen 25.april!

<https://dennationalescene.eventim-billetter.no/webshop/webticket/shop?kassierer=webuib&event=1060>